

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

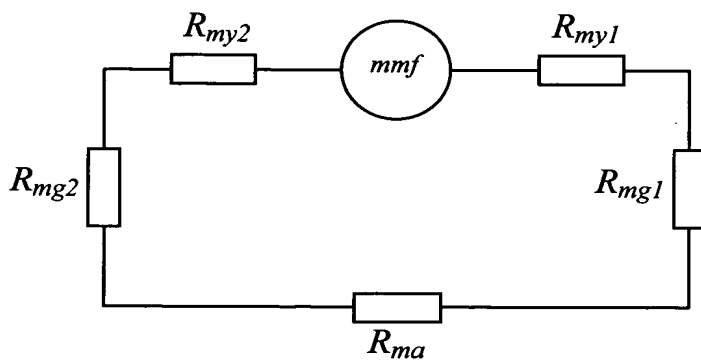
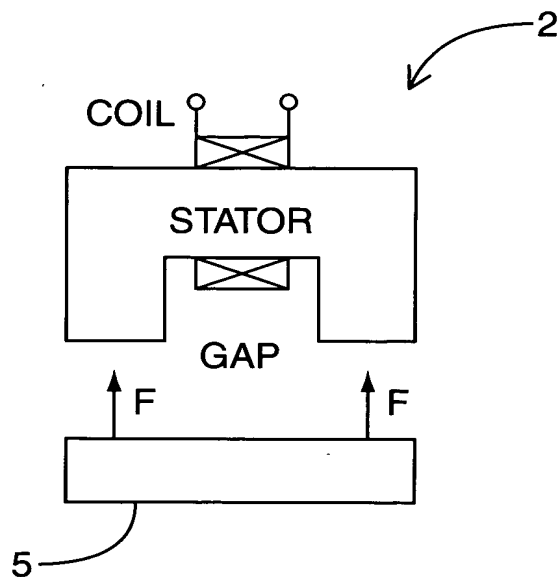
Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

1/14



$$mmf = N \diamond I$$

$$R_{mk} = \frac{L_{mk}}{\mu_{mk} \diamond A_{mk}}$$

$$R_{me} = \sum_k R_{mk}$$

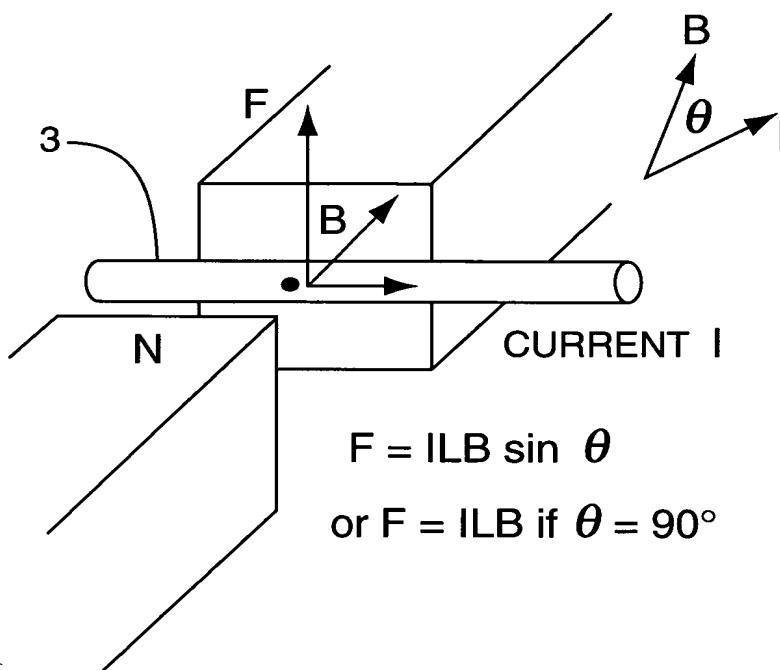
$$\Phi = \frac{mmf}{R_{me}}$$

$$F = \frac{\Phi^2}{2 \diamond \mu_0 \diamond A}$$

FIG. 1  
 PRIOR ART



2/14



$$F = ILB \sin \theta$$

or  $F = ILB$  if  $\theta = 90^\circ$

$$F = qvB \sin \theta$$

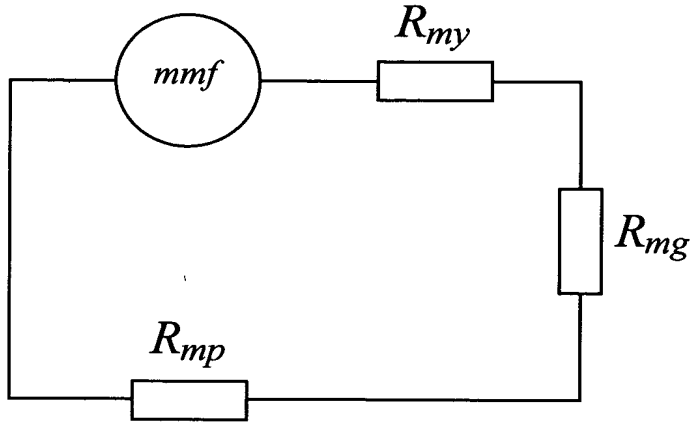
$$F = q \frac{L}{t} B \sin \theta$$

$$F = \frac{q}{t} LB \sin \theta$$

$$F = ILB \sin \theta$$

FIG. 2  
PRIOR ART

3/14



$$mmf = N \oint I$$

$$R_{mk} = \frac{L_{mk}}{\mu_{mk} \oint A_{mk}}$$

$$R_{me} = \sum_k R_{mk}$$

$$\Phi = \frac{mmf}{R_{me}}$$

$$F = -\frac{1}{2} \oint \Phi^2 \oint \frac{dR_{mg}}{dx}$$

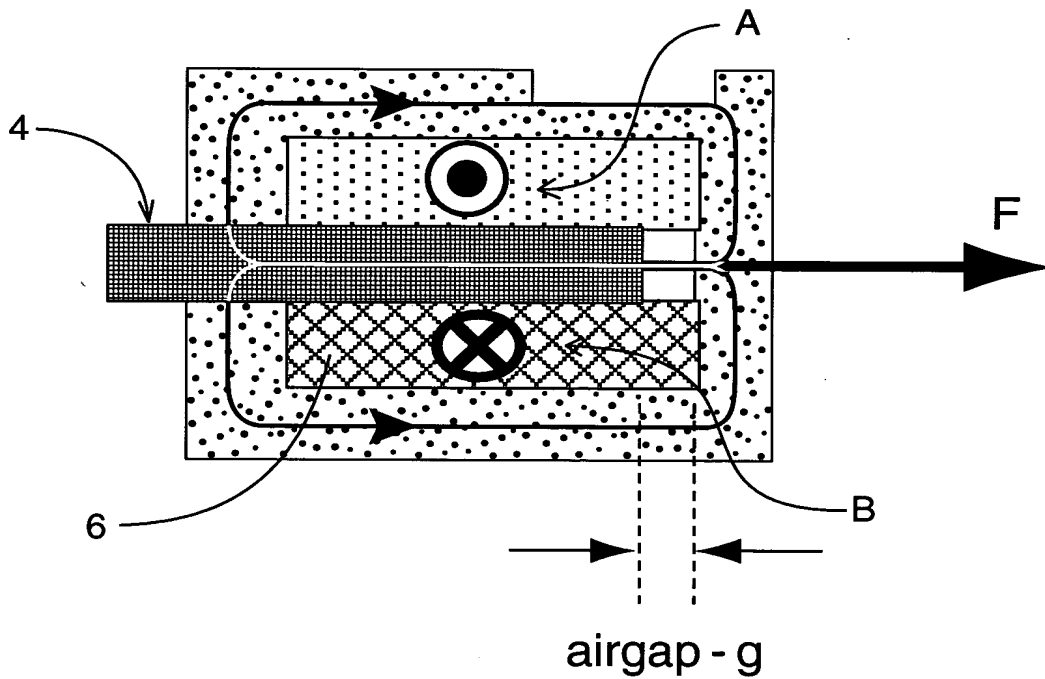
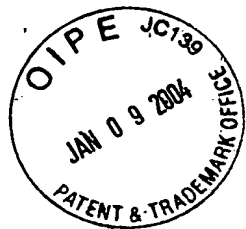


FIG. 3  
 PRIOR ART



4/14

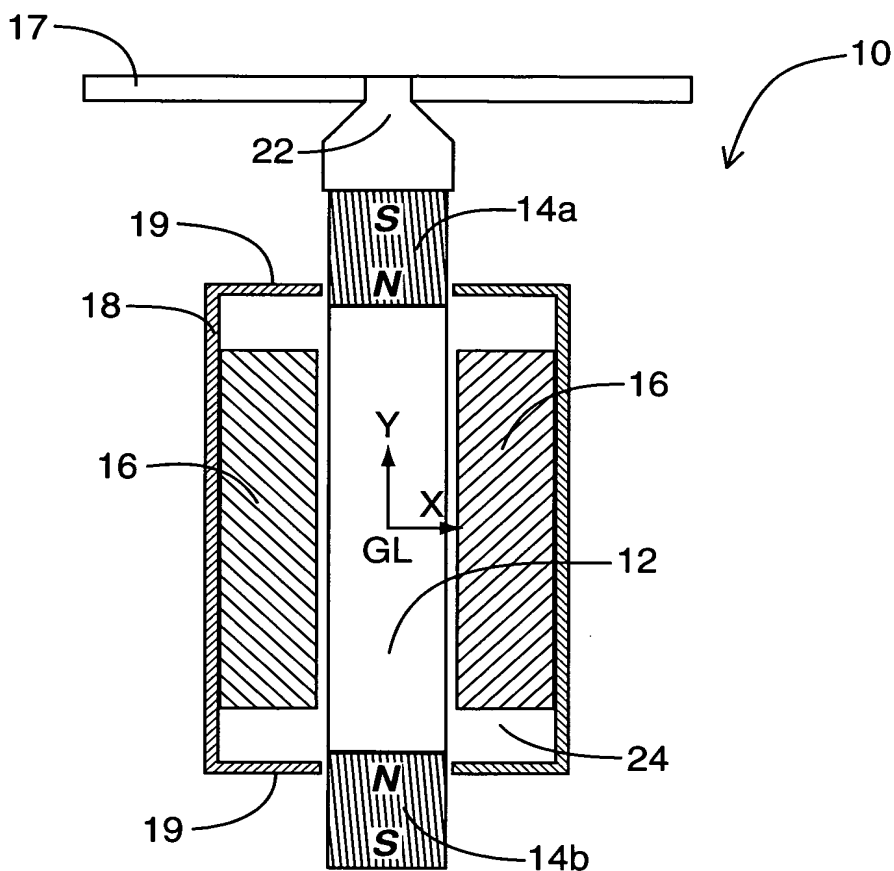


FIG. 4



5/14

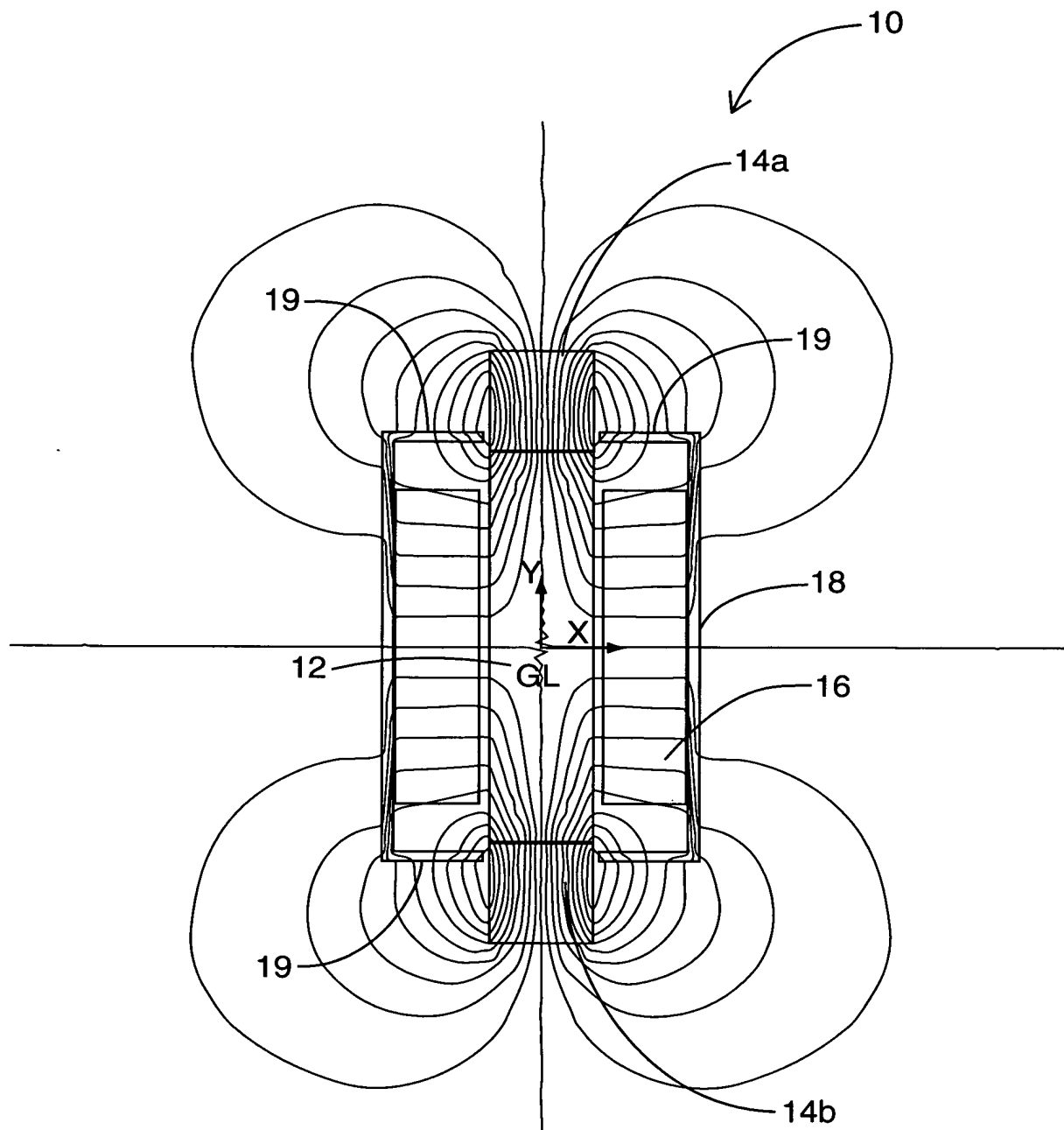
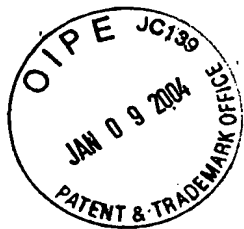


FIG. 5A



6/14

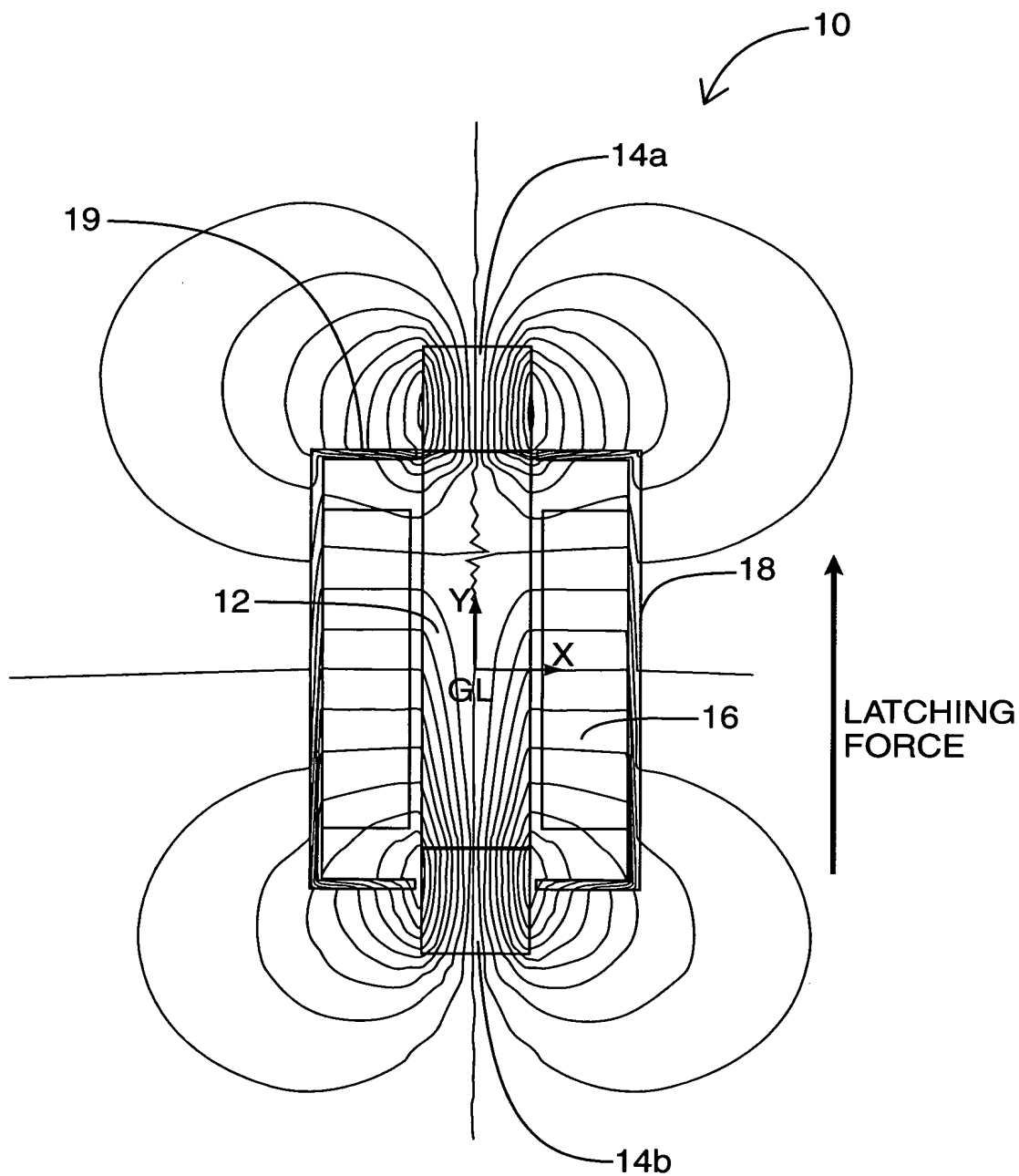
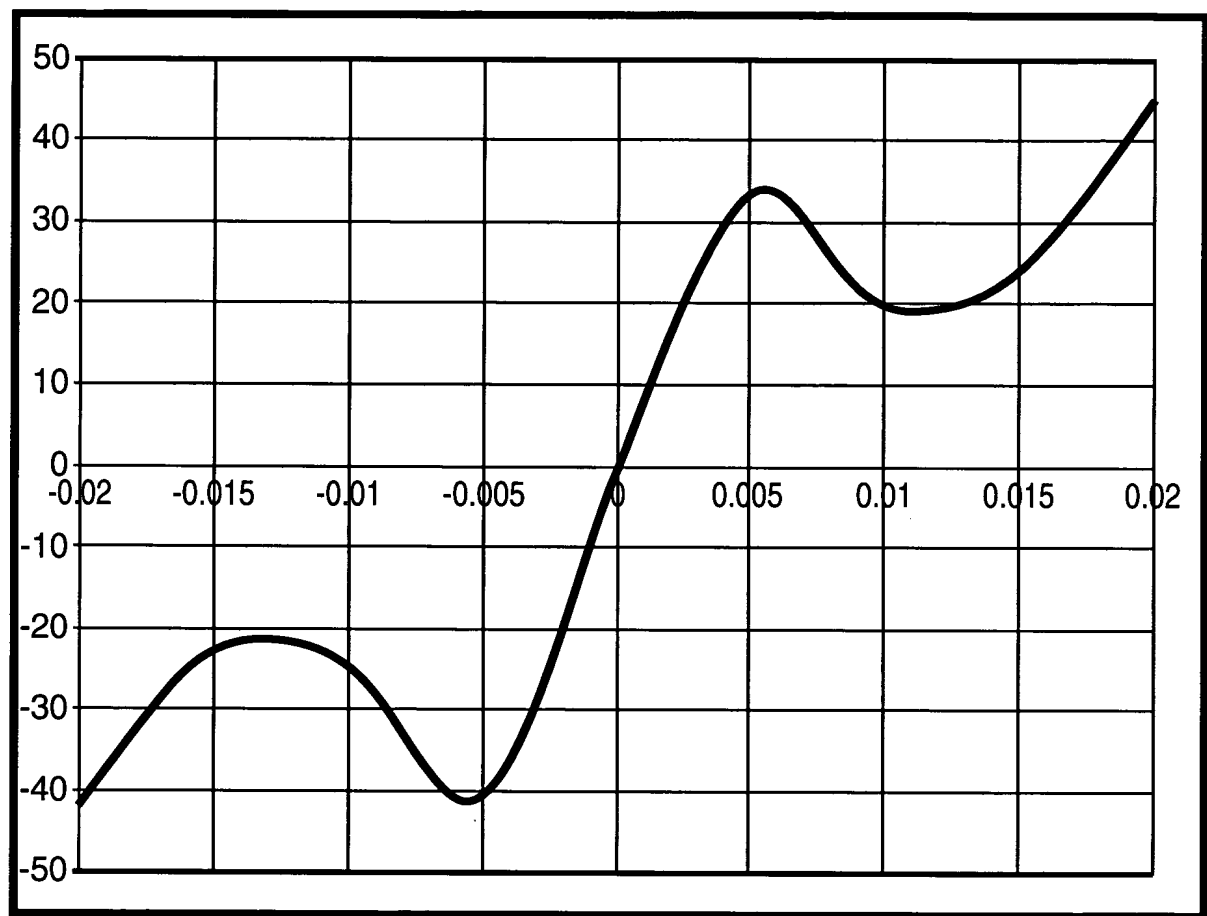


FIG. 5B



7/14

**LATCHING FORCE (GRAMS)**



**POSITIONAL DISPLACEMENT  
(INCHES)**

**FIG. 5C**





8/14

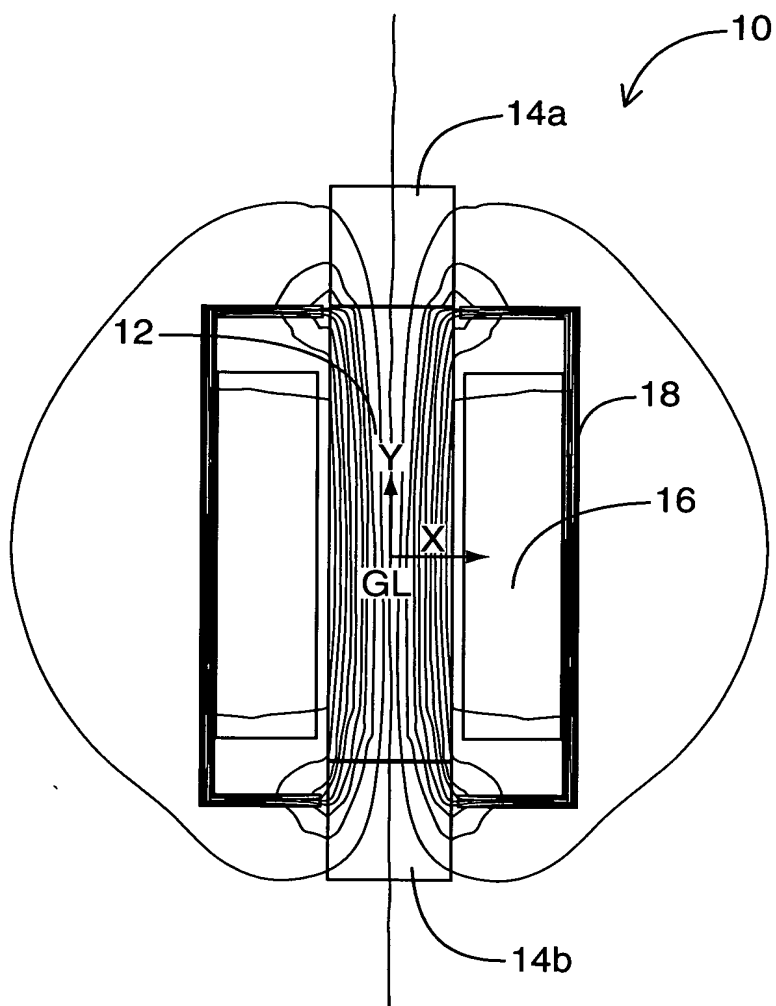


FIG. 6

9/14

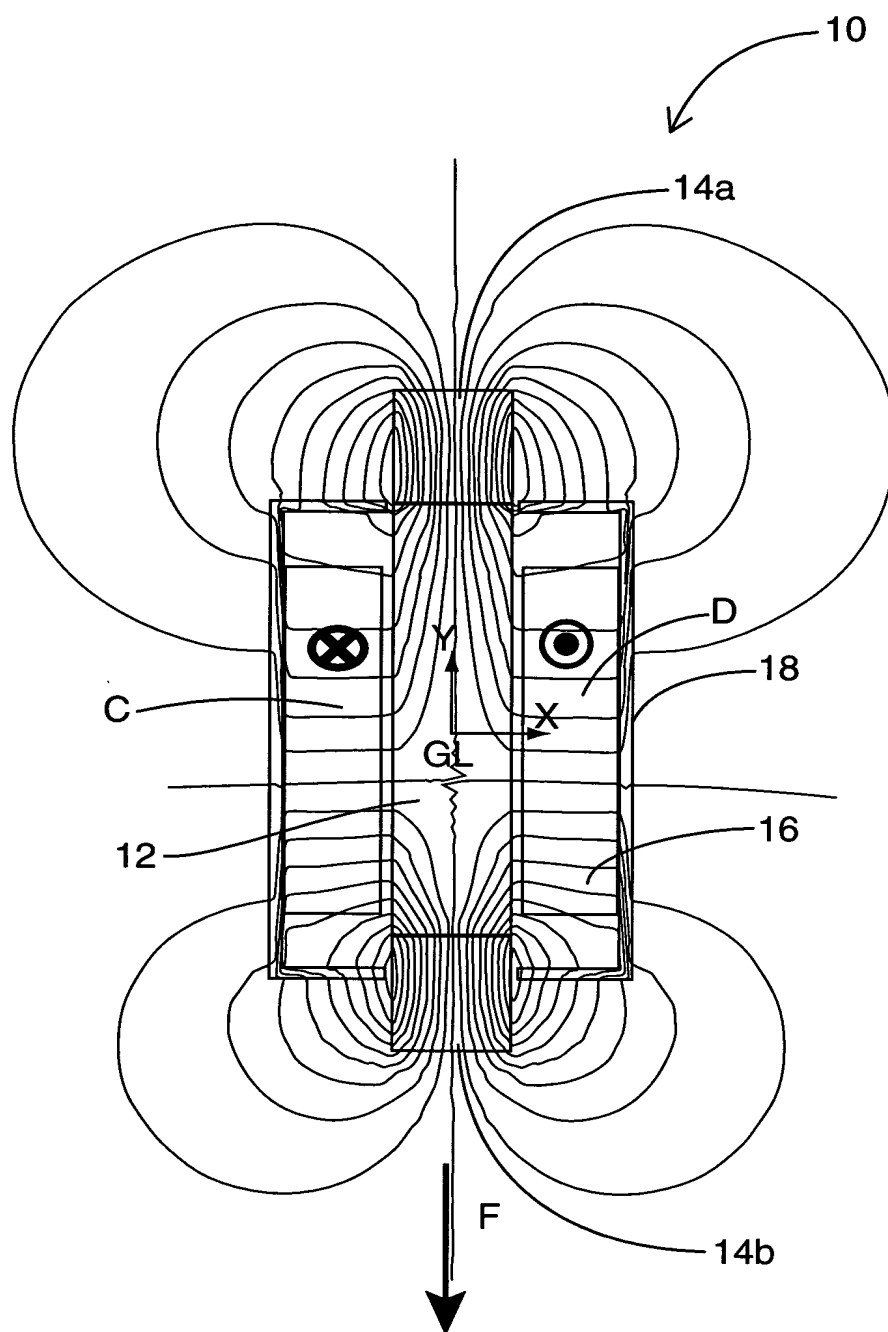


FIG. 7A



10/14

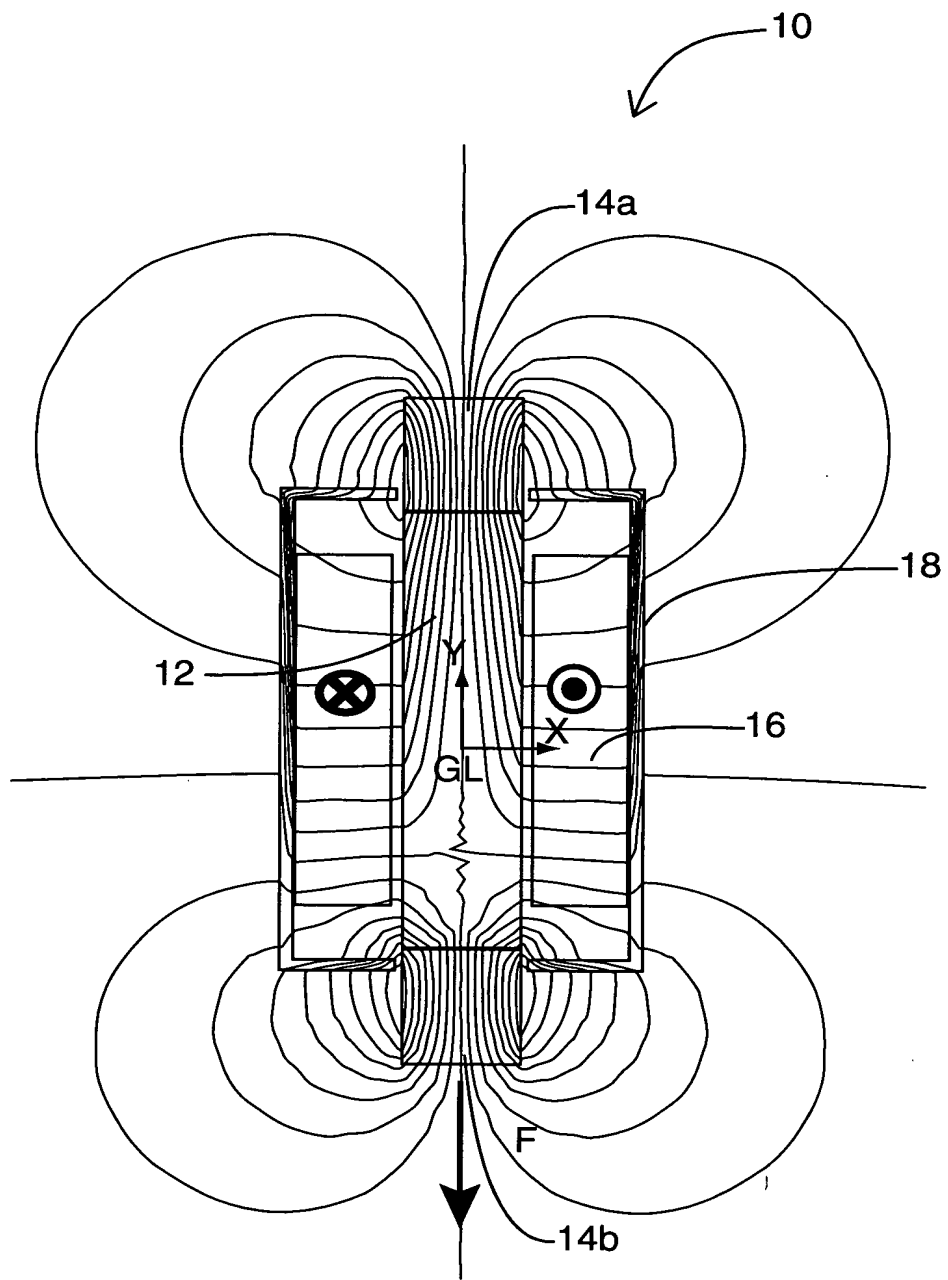
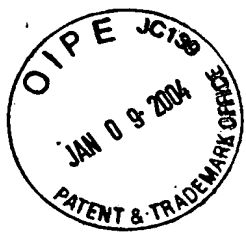


FIG. 7B



11/14

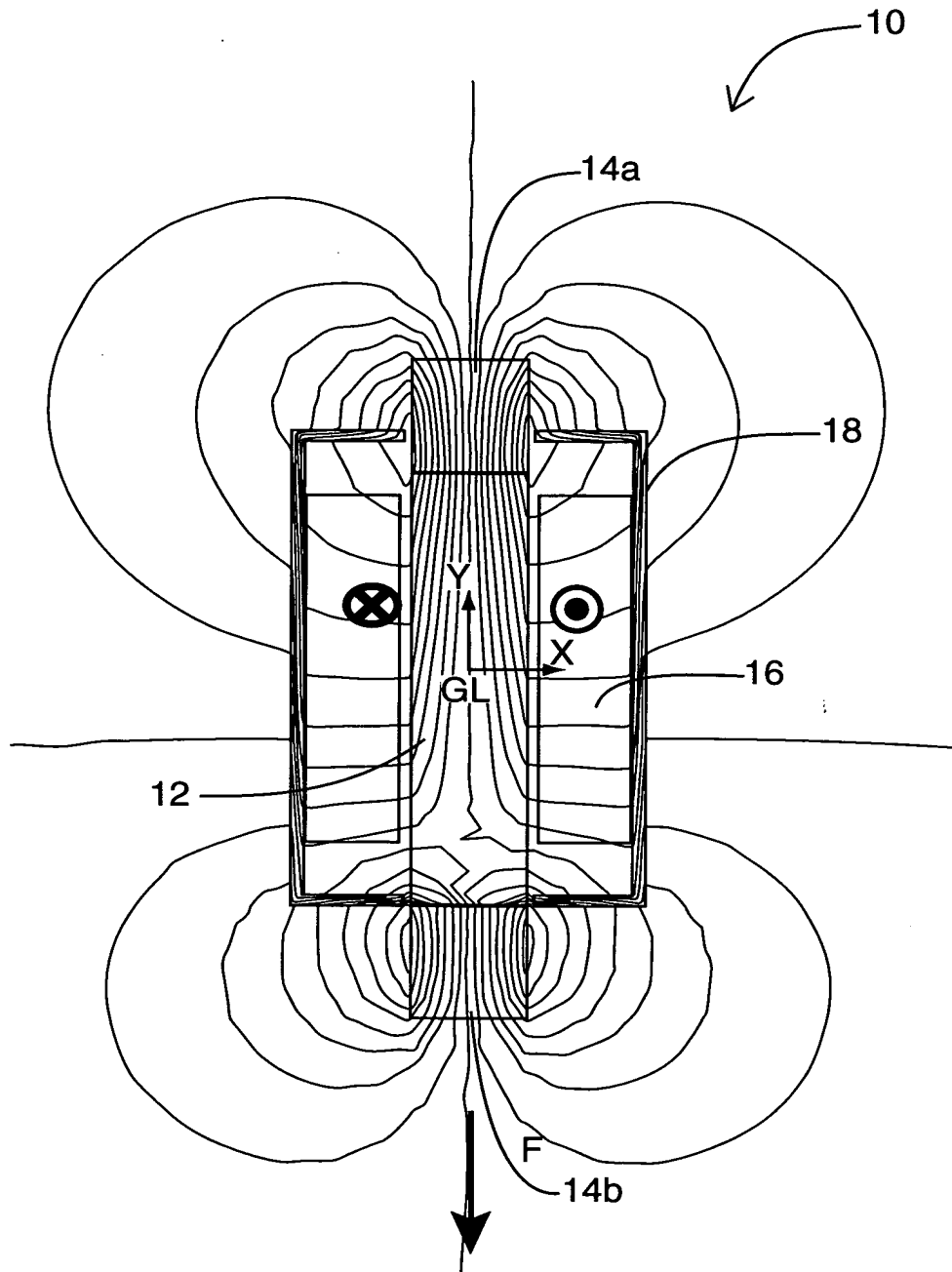
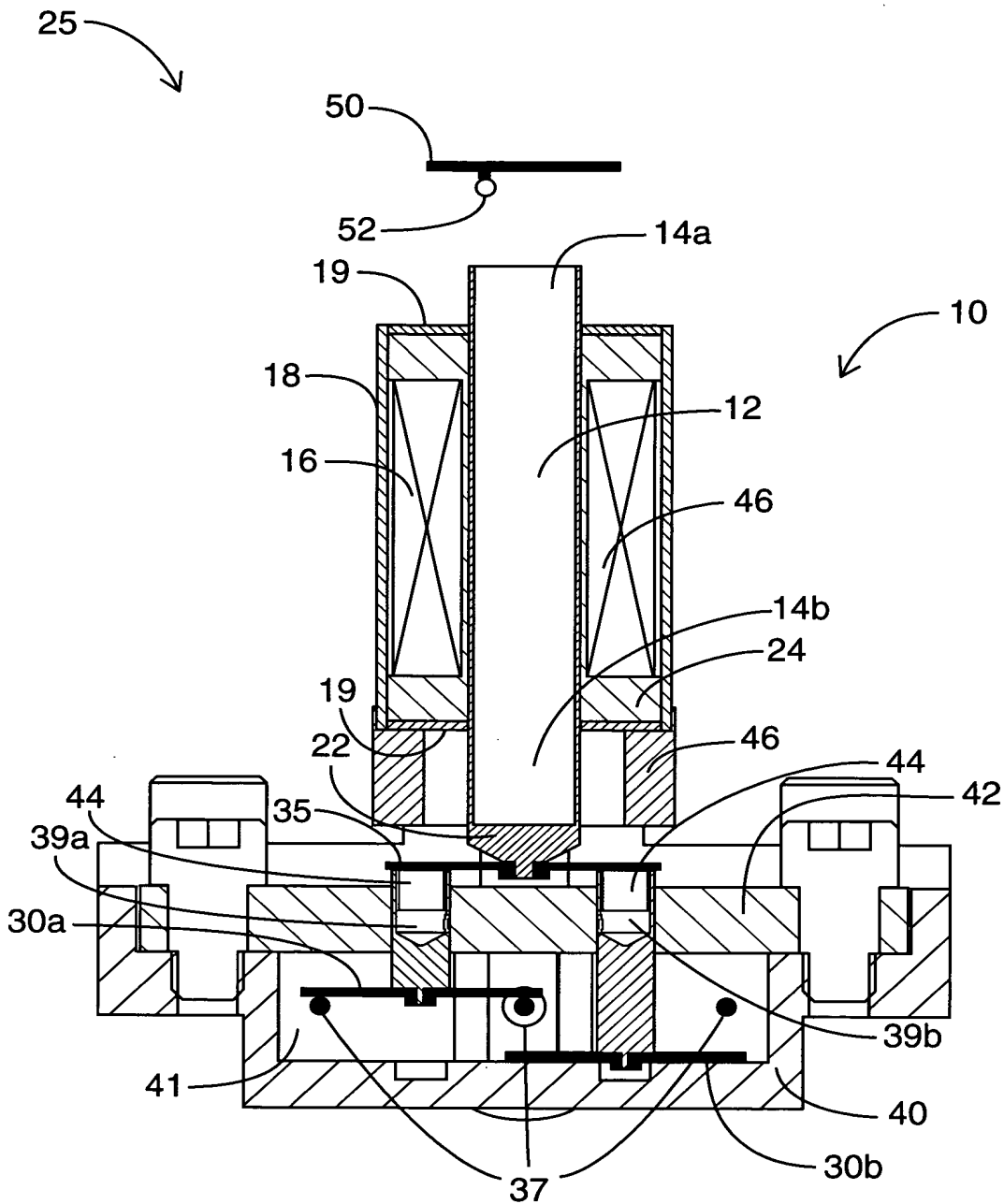


FIG. 7C

12/14



**FIG. 8A**



13/14

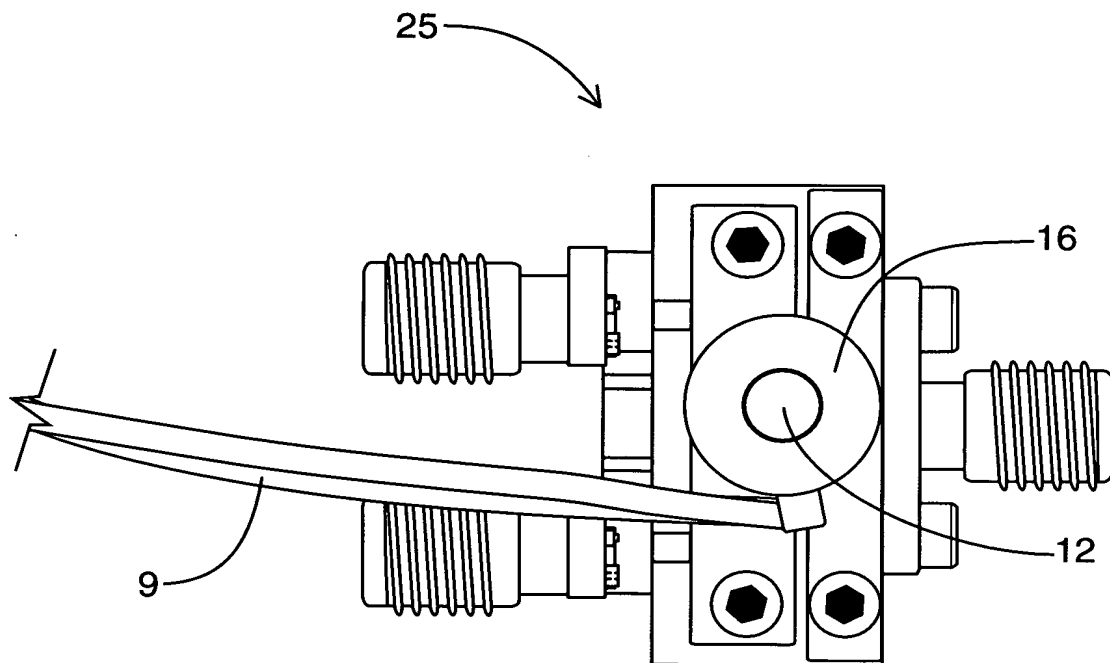


FIG. 8B



14/14

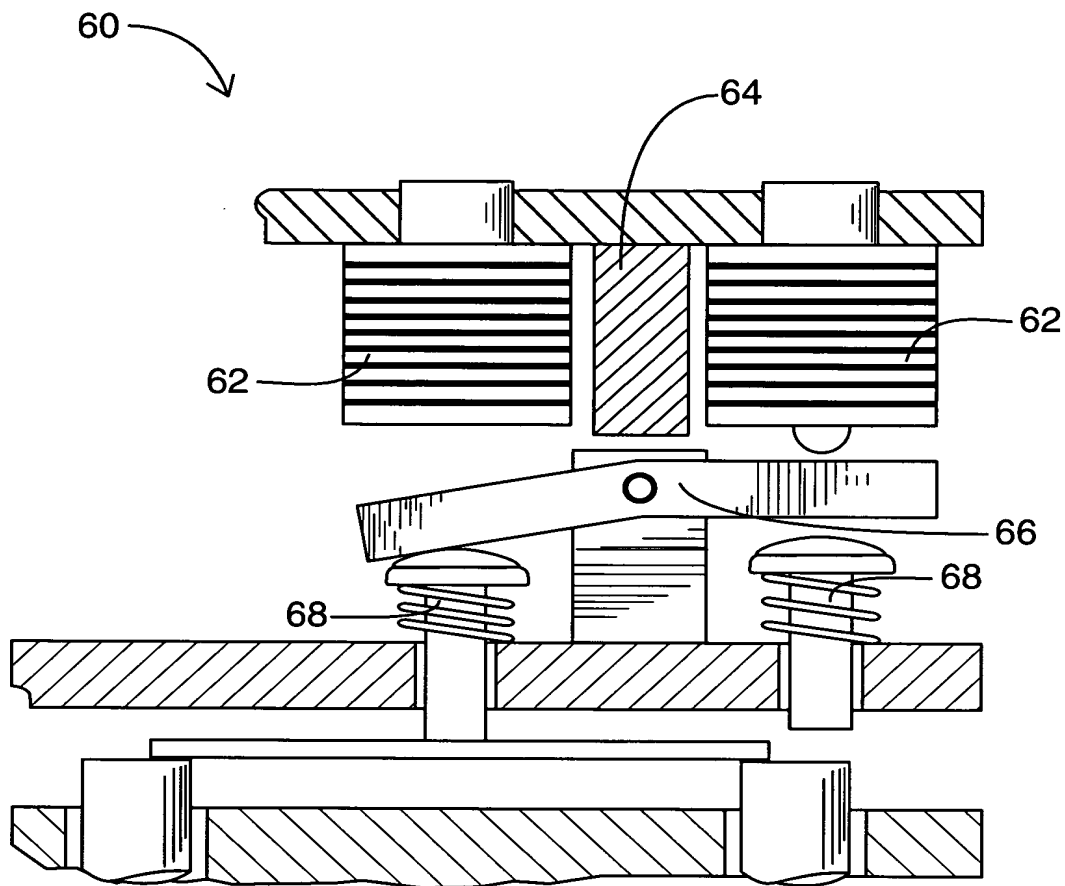


FIG. 9  
PRIOR ART